## ChillTec Thermo Electric CPU Cooler

## **Thermo Electric Cooler**

A TEC (thermo-electric cooler,) also known as a "Peltier Cooler", is a solid-state active heat pump capable of transferring heat from one side of the device to the other. Ultra uses a TEC, sandwiched between two copper plates, each plate with four heat-pipes leading to a large, fan cooled radiator. Because TEC's are capable of cooling below room temperature, often condensation is a concern. But not with the Ultra Chill-TEC. The Chill-TEC's control unit does not apply power to the TEC unless the CPU reaches a certain temperature. Up to this point, the CPU is cooled by the heat-pipes on the "cold" side of the TEC. Once the CPU is hot, power is applied to the TEC and the CPU is chilled. The hot side of the TEC is cooled by the second set of heat-pipes. This perfect balance of thermo-electric cooling and heat-pipe cooling ensures the CPU is kept at the perfect operating temperature. Ideal for hardcore use, even opening up the potential for overclocking that standard air cooling alone can not provide.

## **Specifications**

- · Socket Types: Intel Socket 775, AMD Socket AM2 / 754 / 939 / 940
- · Cooler Dimensions: 128 x 104 x 147
- · Thermoelectric Chip: 40 x 40 / 12V DC
- · Total Power Dissipation:

0% Load = 5 W

50% Load = 28 W

100% Load = 50 W

- · Heatsink Material: 4 Heat Pipes, Aluminum Fins, Copper Base
- · Heatsink Dimensions: 90 x 90 x 160 mm
- · Fan Dimensions: 92 x 92 x 25 mm
- · Fan Voltage Rating: 12V DC
- · Fan Speed and Noise Levels:

Low 2000rpm / 20 dB(A)

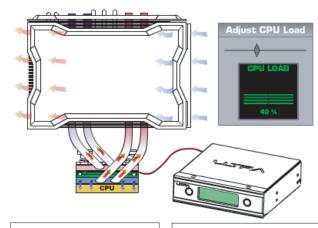
Medium 2400 rpm / 24 dB(A)

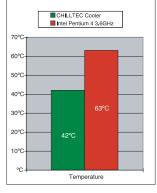
High 2800 rpm / 28 dB(A)

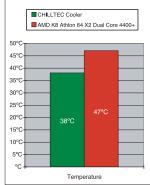
- · Thermal Resistance: 0.12-0.15(°C/W)
- · Weight: 985g (With Fan)
- $\cdot$  Temperature Monitor Range: 0°F~99°F / 32°F ~ 210.2°F
- TEC Temperature Response Time to Control Unit: < 1 Second
- · Controller Dimensions: 150 x 147 x 43 mm
- · Controller Weight: 508 g



How a ChillTec Thermo-Electric Cooler (TEC) Works







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Part #: ULT33186 UPC#: 022769331867

Weight: 4.1 lb. Dimensions: 5.1x5.9x4.1"

1-800-830-0051
www.ultraproducts.com